

Heavy Equipment Operation Problems

Soil excavation and grading operations often contribute to **Pointless Personal Pollution**. By loosening large amounts of soil and sediment, earthmoving activities can cause sediment to flow into gutters, storm drains and Florida's waterways.

Sediment is the most common pollutant washed from work sites, creating multiple problems once it enters the water. Sediment clogs the gills of fish, blocks light transmission and increases water temperature, all of which harm aquatic life, disturbing the food chain upon which both fish and people depend.

Sediment also carries with it other work-site pollutants such as pesticides, cleaning solvents, cement wash, asphalt and car fluids like motor oil, grease and fuel. Thus, poorly maintained vehicles and heavy equipment leaking fuel and oil at the construction site also contribute to water pollution.

Solutions

Best Management Practices that include the proper handling, storage and disposal of materials can prevent pollutants from entering waterways through the storm drain system.



Stormwater BMPs: Solutions for Heavy Equipment Operation Problems

General Business Practices

Schedule excavation and grading work for dry weather.

Use as little water as possible for dust control.

Equipment Maintenance

Maintain all vehicles and heavy equipment. **Inspect frequently for leaks.**

Conduct all vehicle/equipment maintenance and refueling at one location—**away from storm drains.**

Perform major equipment / vehicle repairs and washings off-site.

Use gravel approaches where truck traffic is frequent to reduce soil compaction and limit the tracking of sediment into streets.

Use drip pans or drop cloths to catch drips and spills, if you drain and replace motor oil, radiator coolant or other fluids on-site. Collect all used fluids, store in separate containers and recycle whenever possible.

Do not use diesel oil to lubricate equipment or parts.

Cleaning Up

Sweep up dry spilled materials immediately. Never attempt to bury them or “wash them away” with water.

Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.

Report significant spills to the appropriate spill response agencies immediately. Use the telephone numbers provided on this pamphlet for further information.



Clean up leaks, drips and other spills immediately. This will prevent contaminated soil or residue on paved surfaces.

Never hose down “dirty” pavement or surfaces where materials have spilled. Use dry cleanup methods whenever possible.

Erosion Prevention

After clearing, grading or excavating, exposed soil poses a clear and immediate danger of stormwater pollution.

Re-vegetation (permanent or temporary) is an excellent form of erosion control for any site.

Avoid excavation and grading activities during wet weather.

Construct diversion dikes to channel runoff around the site. Line channels with grass or roughened pavement to reduce runoff velocity.



Cover stockpiles and excavated soil with secured tarps or plastic sheeting.

Remove existing vegetation only when absolutely necessary. Large projects should be conducted in phases.

Consider planting temporary vegetation for erosion control in slopes or where construction is not immediately planned.

Plant permanent vegetation as soon as possible, once excavation and grading activities are complete.



Employee & Client Education

Educate your employees. Include water quality training in new employee orientations and conduct annual review sessions.

Post BMPs where employees and clients can see them. Showing customers you protect Florida's waterways is good public relations.

Contacts



To report a spill, learn about waste disposal or report illegal dumping please contact your local public works department.

KY Transportation Cabinet adapted work by the Florida Department of Environmental Protection.